

To: Harris County Precinct Two Commissioner Adrian Garcia
From: Katie Short, Director; Amber Weed, Chief of Staff and Policy Director; Amy Rose, Senior Analyst; Ramin Naderi, Analyst
CC: Mike Lykes, Mercedes Sánchez, Kris Banks, and Michelle Galindo with Precinct Two; Barbie Robinson, Jennifer Kiger, and Dr. Ericka Brown with Harris County Public Health
Date: March 22, 2022
Re: **Monthly Memo on COVID-19 Vaccine Distribution, March 2022**

EXECUTIVE SUMMARY

In January 2021, Precinct Two requested the Analyst's Office produce a monthly memo regarding the distribution of COVID-19 vaccinations in Harris County. This is the fifteenth memo of a standing monthly memo the Analyst's Office produces as the vaccine distribution continues to evolve at the federal, state, and local levels.

This memo provides an overview of the COVID-19 pandemic and vaccine distribution in Harris County. Key findings from the data in this memo include:ⁱ

- As of March 6, 2022, **61.1% (2,888,865) of individuals in Harris County were fully vaccinated.**
- As of March 6, 2022, **9.9% (468,030) of individuals in Harris County were partially vaccinated.**
- As of March 6, 2022, **20.0% (944,041) of individuals in Harris County had received booster shots, a 5.2% increase (from 897,219 to 944,041) from February 8, 2022.**
- Between February 8, 2022 and March 8, 2022, **the number of individuals in Harris County vaccinated with at least one dose increased by 0.9% (from 3,327,091 to 3,356,895).**
- Between February 8, 2022 and March 6, 2022, **the number of individuals in Harris County fully vaccinated increased by 1.2% (from 2,853,610 to 2,888,865).**
- **Zip codes 77336 and 77090 have the fewest number of individuals per 100,000 residents fully vaccinated (38,492 and 42,241 respectively).**
- **Zip codes 77401 and 77019 have the greatest number of individuals per 100,000 residents fully vaccinated (89,059 and 93,287 respectively).**ⁱⁱ

ⁱ IMPORTANT NOTE: Not all data sums to totals reported. This is due to poor and inconsistent data reporting by providers, and because patients have not been required to disclose all demographic data. DSHS reports it is actively conducting county and provider-level analyses to identify if certain providers or areas are underreporting more than others for targeted data entry funding and training.

ⁱⁱ Zip code analysis excludes zip codes that report a greater number of residents vaccinated than the zip code's total population. This discrepancy is due to poor and limited data.

- The median of the median incomes of the fifteen Harris County zip codes with **the fewest number of individuals per 100,000 residents fully vaccinated is \$50,461.**
- The median of the median incomes of the fifteen Harris County zip codes with **the greatest number of individuals per 100,000 residents fully vaccinated is \$91,138.**
- The number of individuals fully vaccinated in Harris County varies by age group.
 - **81.3% (156,330) of individuals ages 75 and over are fully vaccinated;**
 - **84.2% (480,768) of individuals ages 60-74 are fully vaccinated;**
 - **80.3% (675,926) of individuals ages 45-59 are fully vaccinated;**
 - **70.2% (736,757) of individuals ages 30-44 are fully vaccinated;**
 - **59.9% (739,763) of individuals ages 12-29 are fully vaccinated; and,**
 - **20.8% (99,314) of individuals ages 5-11 are fully vaccinated.**
- The number of individuals fully vaccinated in Harris County varies by race and ethnicity.
 - **38.4% (340,233) of individuals who identify as Black are fully vaccinated;**
 - **51.6% (1,050,041) of individuals who identify as Hispanic/Latino are fully vaccinated;**
 - **53.7% (703,080) of individuals who identify as White are fully vaccinated;**
 - **62.3% (216,679) of individuals who identify as Asian American/Pacific Islander are fully vaccinated; and,**
 - **80.0% (6,748) of individuals who identify as American Indian/Alaskan Native are fully vaccinated.**
- The demographic in Harris County with the **highest percentage of individuals vaccinated are individuals who identify as Hispanic ages 65-74 (80%).** The demographics with the **lowest percentage of individuals vaccinated are individuals who identify as Black ages 5-11 (10%) and individuals who identify as American Indian/Alaskan Native ages 5-11 (10%).**
- Between January 1, 2020, and March 8, 2022:
 - **All providers in Harris County administered a cumulative 8,779,529 COVID-19 PCR tests;ⁱⁱⁱ**
 - **There were 866,082 positive COVID-19 cases confirmed by a PCR test in Harris County; and,**
 - **There were 7,298 confirmed COVID-19-related deaths in Harris County.**

The Analyst's Office acknowledges Harris County Public Health and the Harris County Office of Management and Budget for their significant contributions to this memo.

ⁱⁱⁱ PCR refers to the polymerase chain reaction or nucleic acid amplification tests commonly used to test for COVID-19.

INTRODUCTION

In January 2021, Precinct Two requested the Harris County Commissioners Court's Analyst's Office (the "Analyst's Office") produce a monthly memo regarding the distribution and administration of COVID-19 vaccinations in Harris County. This is the fifteenth memo of a standing monthly memo the Analyst's Office produces as the vaccine distribution continues to evolve at the federal, state, and local levels.

This memo includes data and analysis regarding COVID-19 testing, cases, deaths, and vaccine administration in Harris County. Precinct-level age, race, and ethnicity data are provided where available.

METHODOLOGY

Data utilized in this memo are from Harris County Public Health (HCPH); the Centers for Disease Control and Prevention (CDC); and Harris County's Applied Technologies Location Analysis and Statistics (ATLAS) System. Data reflect COVID-19 vaccine doses administered in Harris County by all providers from the beginning of the vaccine rollout, December 14, 2020, through March 8, 2022, and all testing, confirmed cases, and COVID-19-related death data from January 1, 2020, through March 8, 2022.

All references to "fully vaccinated" refer to the administration of either a two-dose or one-dose vaccine. "Fully vaccinated" excludes any third shots (or "booster" shots) administered.

Data Collected from Harris County Public Health (HCPH)

Harris County Public Health (HCPH) is the primary data source for this memo. HCPH staff analyzes vaccine data received by the Texas Department of State Health Services' (DSHS) ImmTrac2 system. As the Local Health Authority for the County, HCPH also analyzes and receives testing, confirmed cases, and COVID-19-related death data from local health providers (including the City of Houston) and other sources. Income data provided by HCPH reflects the American Community Survey, 2015-2019 Five-Year Estimates. HCPH data and/or analysts aid in the development of all tables and figures.

DSHS advised the following via email regarding the data available on ImmTrac2:

- Providers in Texas have up to 24-hours to report doses administered in ImmTrac2, and the dashboard is updated by 4:00 pm with data reported as of 11:59 pm the previous night. This means there could be as much as a 48-hour lag between when a dose is administered and when it appears on ImmTrac2.

On November 3, 2021, new boundaries for commissioner precincts, adopted by the Harris County Commissioners Court, went into effect. This memo incorporates the new commissioner precinct boundaries. As such, precinct-level analysis will differ from previous versions prior to the December 2021 memo.

Data Collected from Centers for Disease Control and Prevention (CDC)

The Analyst's Office collected information on social vulnerability from the Centers for Disease Control and Prevention (CDC). Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from

natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The Social Vulnerability Index (SVI) was created by the CDC and depicts the social vulnerability of communities, at the census tract level, within a given county.^{iv} SVI groups fifteen census-derived factors into four themes that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability Index combines all the variables to provide a comprehensive assessment. SVI data aided with the development of **Table 2**.

Data Collected from Applied Technologies Location Analysis and Statistics (ATLAS)

The Analyst's Office collected commissioner precinct zip code data from Harris County's Applied Technologies Location Analysis and Statistics (ATLAS) System. As with data provided by Harris County Public Health, information collected from ATLAS reflects the commissioner precinct boundaries that went into effect November 3, 2021.

Data Collected from Harris County Office of Management and Budget

The Analyst's Office collected commissioner precinct race and ethnicity data from the Harris County Office of Management and Budget (OMB). As with data provided by Harris County Public Health, data collected from OMB reflects the commissioner precinct boundaries that went into effect on November 3, 2021.

NOTE: All analyses in this memo, except **Figure 3**, reflect *individuals fully vaccinated*, rather than *individuals with at least one dose*.

Prior versions of this memo used population statistics for Harris County from the 2019 American Community Survey (ACS) 1 Year Estimates. All data in this memo uses population estimates from the recently released 2020 Census, except **Table 3**, **Figure 4**, and **Figure 5**, which use 2019 ACS estimates.

^{iv} Centers for Disease Control (CDC) Social Vulnerability Index, a tool to identify socially vulnerable communities.

BACKGROUND

The spread of the novel coronavirus, the cause of COVID-19, began in the United States in early 2020. Since then, local health entities have tracked the testing, the number of confirmed positive cases, and deaths related to COVID-19.

In December 2020, two-dose vaccines from two producers, Moderna and Pfizer-BioNTech, were authorized for emergency use by the US Food and Drug Administration (FDA). In February 2021, the FDA authorized Johnson & Johnson's (J&J) one-dose vaccine for emergency use. On August 23, 2021, the FDA granted full approval for the Pfizer-BioNTech vaccine for those 16 and older, with continued availability for those 12-15 years of age under emergency use authorization. On October 29, 2021, the FDA authorized the emergency use of the Pfizer-BioNTech vaccine to include children 5 through 11 years of age.^v On January 31, 2022, the FDA granted full approval of the Moderna vaccine to those 18 and older.^{vi}

From December 2020 to March 28, 2021, vaccines were made available for individuals in the Texas Department of State Health Services' (DSHS) Phase 1A (front-line healthcare workers and residents of long-term care facilities) and 1B (individuals ages 65+ and individuals ages 16+ with "at least one chronic medical condition that puts them at increased risk for severe illness from the virus that causes COVID-19").^{vii} ^{viii} On March 29, 2021, Texas expanded vaccine eligibility to all individuals age 16 and older. Beginning May 12, 2021, Texas expanded vaccine eligibility to all individuals age 12 and older. Currently, all vaccines are authorized for individuals age 18 and older; only the Pfizer-BioNTech vaccine is authorized for individuals age 5 and older.^{ix}

On August 12, 2021, the FDA amended the emergency use authorizations for the Moderna and Pfizer-BioNTech vaccines to allow for an additional third dose, a "booster," to be administered to immunocompromised individuals.^x On September 22, 2021, the FDA amended the emergency use authorization for the Pfizer-BioNTech COVID-19 Vaccine to allow for use of a single booster dose in certain populations.^{xi} ^{xii} On October 20, 2021, the FDA further expanded the emergency use authorization to permit single-dose booster shots of the Moderna and Johnson & Johnson COVID-19

^v Commissioner, O. of the. (2021, October 29). *FDA Authorizes Pfizer-BioNTech COVID-19 Vaccine for Emergency Use in Children 5 through 11 Years of Age*. FDA; FDA. <https://www.fda.gov/news-events/press-announcements/fda-authorizes-pfizer-biontech-covid-19-vaccine-emergency-use-children-5-through-11-years-age>

^{vi} Commissioner, O. of the. (2022, January 31). *Coronavirus (COVID-19) Update: FDA Takes Key Action by Approving Second COVID-19 Vaccine*. FDA; FDA. <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-takes-key-action-approving-second-covid-19-vaccine>

^{vii} Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1 Definition

^{viii} Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1B Definition

^{ix} *COVID-19 Vaccine Information*. (n.d.). Texas Department of State Health Services. Retrieved May 27, 2021, from <https://dshs.texas.gov/covidvaccine/>

^x *FDA Authorizes Additional Vaccine Dose for Certain Immunocompromised Individuals*. (August 12, 2021). US Food and Drug Administration. Retrieved August 30, 2021 from <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-additional-vaccine-dose-certain-immunocompromised>

^{xi} Pfizer-BioNTech boosters were authorized for individuals 65 years of age and older; individuals 18 through 64 years of age at high risk of severe COVID-19; and individuals 18 through 64 years of age whose frequent institutional or occupational exposure to SARS-CoV-2 puts them at high risk of serious complications of COVID-19 including severe COVID-19.

^{xii} *FDA Authorizes Booster Dose of Pfizer-BioNTech COVID-19 Vaccine for Certain Populations*. (September 22, 2021). US Food and Drug Administration. Retrieved October 28, 2021 from <https://www.fda.gov/news-events/press-announcements/fda-authorizes-booster-dose-pfizer-biontech-covid-19-vaccine-certain-populations>

vaccines.^{xiii xiv} On November 19, 2021, the FDA amended the emergency use authorization of both the Moderna and Pfizer-BioNTech vaccines, allowing for a single dose booster to all individuals 18 years or older, after completion of primary vaccination with an FDA-authorized or approved COVID-19 vaccine.^{xv}

Table 1 summarizes COVID-19 vaccine approvals by the FDA since December 2020.

Table 1

US Food and Drug Administration (FDA) Vaccine Approvals December 2020 – March 8, 2022			
Manufacturer	Emergency Authorization Date/Approval Age	Full FDA Approval Granted	FDA Booster Authorization Date for All Adults (18+)
Pfizer-BioNTech	12/11/2020 (16+) 5/10/2021 (12-15) 10/29/2021 (5-11)	8/23/2021 (For 16+ Only)	11/19/2021
Moderna	12/18/2020 (18+)	1/31/2022 (18+)	11/19/2021
Johnson & Johnson	2/27/2021 (18+)	Not Currently Granted	10/20/2021

Source: US Food and Drug Administration

To incentivize unvaccinated residents to seek vaccination, Harris County and the City of Houston launched separate cash card incentive programs for individuals to receive their first vaccine dose in summer 2021. The Harris County program was launched on August 17, 2021, and offered \$100 cash cards to residents who received their first dose of the COVID-19 vaccine from August 17 to September 30, at any authorized provider in the County.^{xvi} Similarly, the City of Houston launched a cash card incentive program on August 26, 2021, stating that the first 20,000 individuals to get fully vaccinated at an eligible health department site would receive \$150 in the form of cash cards; \$100 cash card for their first dose, and an additional \$50 cash card for their second dose.^{xvii} These two incentive programs concluded in September 2021.

^{xiii} Moderna boosters are available for individuals 65 years of age and older; individuals 18 through 64 years of age at high risk of severe COVID-19; and individuals 18 through 64 years of age with frequent institutional or occupational exposure to SARS-CoV-2. Johnson & Johnson boosters are available for individuals 18 years of age and older.

^{xiv} *Coronavirus (COVID-19) Update: FDA Takes Additional Actions on the Use of a Booster Dose for COVID-19 Vaccines.* (October 20, 2021). US Food and Drug Administration. Retrieved October 28, 2021 from <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-takes-additional-actions-use-booster-dose-covid-19-vaccines>

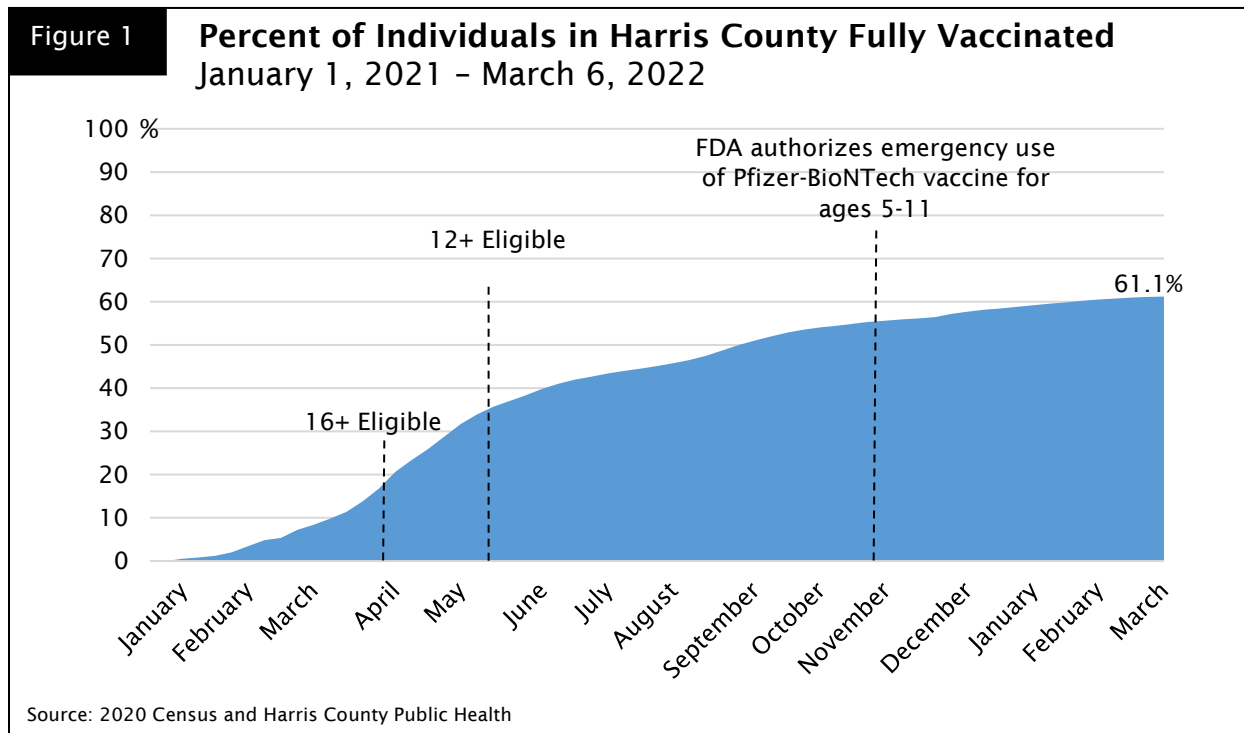
^{xv} Commissioner, O. of the. (2021, November 19). *Coronavirus (COVID-19) Update: FDA Expands Eligibility for COVID-19 Vaccine Boosters.* FDA; FDA. <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-expands-eligibility-covid-19-vaccine-boosters>

^{xvi} *Ready Harris.* (n.d.). Retrieved September 8, 2021, from <https://www.readyharris.org/COVID-19-Incentive-Program>

^{xvii} *Houston Health Department to provide up to \$150 in gift cards for COVID-19 vaccinations.* (n.d.). Retrieved September 8, 2021, from <https://www.houstontx.gov/health/NewsReleases/houston-health-department-to-provide-up-to-150-in-gift-cards-for-covid-19-vaccinations.html>

INDIVIDUALS IN HARRIS COUNTY FULLY VACCINATED

Figure 1 presents the percentage of Harris County individuals fully vaccinated between January 1, 2021, and March 6, 2022.^{xviii} This figure includes individuals vaccinated by Harris County Public Health (HCPH) and all other providers. HCPH reports countywide data regarding individuals fully vaccinated by week—the data presented below extends through the week of February 28–March 6, 2022.



On March 29, 2021, as shown in **Figure 1**, Texas expanded vaccine eligibility to all individuals age 16 and older. Beginning May 12, 2021, Texas expanded vaccine eligibility to all individuals age 12 and older. On October 29, 2021, the FDA authorized the emergency use of the Pfizer-BioNTech vaccine to include children 5 through 11 years of age.^{xix}

As of March 6, 2022, 61.1% (2,888,865) of all individuals in Harris County were fully vaccinated, meaning an individual has received both doses of either the Moderna or Pfizer-BioNTech vaccines or a single dose of the Johnson & Johnson vaccine.^{xx} This reflects a 1.2% (from 2,853,610 to 2,888,865) increase from February 8, 2022 (the prior memo). As of March 6, 2022, a total of 9.9% (468,030) of all individuals in Harris County were partially vaccinated—and 20.0% (944,041) of individuals received booster shots, a 5.2% increase (from 897,219 to 944,041) from February 8, 2022 (the prior memo).

^{xviii} Individuals who are partially vaccinated and individuals fully vaccinated are mutually exclusive, meaning individuals partially vaccinated only includes individuals who have received one vaccine dose of a two-dose shot (Pfizer or Moderna), and individuals fully vaccinated include individuals who have received either the Johnson & Johnson vaccine or two vaccine doses of Pfizer or Moderna.

^{xix} Commissioner, O. of the. (2021, October 29). *FDA Authorizes Pfizer-BioNTech COVID-19 Vaccine for Emergency Use in Children 5 through 11 Years of Age*. FDA; FDA. <https://www.fda.gov/news-events/press-announcements/fda-authorizes-pfizer-biontech-covid-19-vaccine-emergency-use-children-5-through-11-years-age>

^{xx} Figure assumes Harris County's total population of 4,731,145, per the US Census Bureau's 2020 Decennial Census.

NUMBER OF INDIVIDUALS PER 100,000 RESIDENTS FULLY VACCINATED BY ZIP CODE

Table 2 presents the number of individuals per 100,000 residents fully vaccinated by zip code. The table also includes the median income, Social Vulnerability Index (SVI) score, and commissioner precinct for each zip code. Commissioner precinct boundaries do not align with zip code boundaries; some zip codes are in multiple precincts.^{xxi} Precincts are listed in order of the greatest to least percentage of zip code land mass within the precinct.

Social vulnerability describes a community's ability to prevent human suffering and financial loss in the event of a disaster (such as a hurricane or disease outbreak).^{xxii} SVI rankings are based on percentiles ranging from 0 to 1 (with higher values indicating greater vulnerability). SVI data is often presented using quartile classification. This analysis utilizes the CDC's SVI classifications as follows: 0-0.25 (lowest vulnerability); 0.25-0.5 (moderate low); 0.50-0.75 (moderate high); and 0.75-1 (highest vulnerability).

Table 2 ranks zip codes within Harris County to show relative vulnerability in comparison with the rest of Harris County. The median of the median incomes of the fifteen Harris County zip codes with the **fewest number of individuals per 100,000 residents fully vaccinated is \$50,461**. The median of the median incomes of the fifteen Harris County zip codes with the **greatest number of individuals per 100,000 residents fully vaccinated is \$91,138**.^{xxiii}

This analysis excludes zip codes 77027, 77010, 77024, 77030, 77056, 77507, 77523, 77046, and 77498 because they report higher vaccinated populations than the reported zip code population. HCPH suggests that this is likely due to the low population relative to other zip codes, which means measured parameters are sensitive to bad data such as data entry errors, individuals using business addresses in lieu of a home residence, and other factors. For a full list of zip codes, see **Appendix D**.

^{xxi} Zip codes are assigned to commissioner precincts in accordance with the November 3, 2021, commissioner precinct boundaries.

^{xxii} Centers for Disease Control (CDC) SVI 2016 Documentation.

^{xxiii} Analysis excludes zip codes with small percentage of land mass in Harris County and zip code 77507, which has no income data available.

Table 2

Number of Individuals Per 100,000 Residents Fully Vaccinated by Zip Code, Median Income, SVI, and Commissioner Precinct December 14, 2020 – March 8, 2022

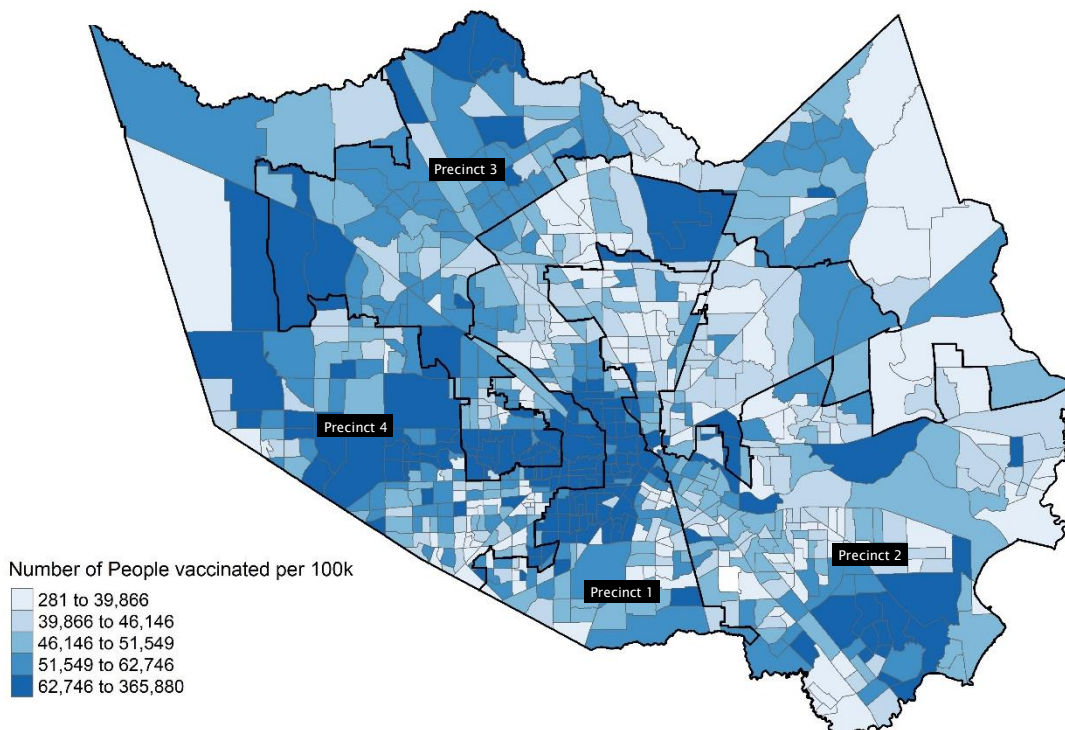
Zip Codes With Fewest Number of Individuals Per 100,000 Residents Fully Vaccinated				
Zip Code	Number Per 100k	Median Income	SVI	Commissioner Precinct(s)
77336	38,492	\$68,596	0.30	3
77090	42,241	\$39,808	0.70	1,3
77532	44,055	\$67,824	0.37	3,2
77562	44,537	\$59,792	0.63	2,3
77004	46,633	\$51,309	0.53	1
77520	47,789	\$50,461	0.82	2
77067	49,061	\$43,282	0.79	1
77530	49,068	\$61,149	0.59	2,3
77050	49,183	\$48,500	0.71	1,2
77060	49,844	\$31,006	0.94	2,1
77503	50,501	\$51,312	0.82	2
77571	50,681	\$76,864	0.38	2
77013	50,772	\$38,665	0.98	2,1
77036	51,519	\$30,952	0.93	4
77091	51,795	\$36,098	0.92	1,2
Zip Codes With Greatest Number of Individuals Per 100,000 Residents Fully Vaccinated				
Zip Code	Number Per 100k	Median Income	SVI	Commissioner Precinct(s)
77041	69,729	\$87,489	0.31	3,4
77009	69,761	\$56,316	0.62	2,1
77094	70,652	\$178,354	NA	4
77083	73,761	\$54,425	0.53	4
77025	74,014	\$76,772	0.32	1
77006	74,576	\$85,956	0.09	1
77002	77,271	\$71,369	0.42	1,2
77008	78,169	\$108,644	0.08	1,4
77007	80,320	\$125,653	0.01	4,1
77005	80,764	\$192,380	0.03	1
77059	81,660	\$139,163	0.05	2
77032	85,325	\$32,473	0.99	1,2
77098	88,509	\$91,138	0.07	4,1
77401	89,059	\$193,950	0.03	1
77019	93,287	\$116,207	0.09	4,1
<div> <div>Highest Vulnerability</div> <div>Moderate High Vulnerability</div> <div>Lowest Vulnerability</div> <div>Moderate Low Vulnerability</div> </div>				
Source: Population estimates from 2020 Census; income data from American Community Survey (ACS) 2019 5-year estimates downloaded from Harris County's Applied Technologies Location Analysis and Statistics (ATLAS); and SVI and vaccination rates from Harris County Public Health				

NUMBER OF INDIVIDUALS PER 100,000 RESIDENTS FULLY VACCINATED BY CENSUS TRACT

Figure 2 presents the number of individuals per 100,000 Harris County residents fully vaccinated by census tract with Harris County commissioner precinct boundaries.^{xxiv}

Figure 2

Number of Individuals Per 100,000 Residents Fully Vaccinated, By Census Tract December 14, 2020 – March 8, 2022



Source: Harris County Public Health

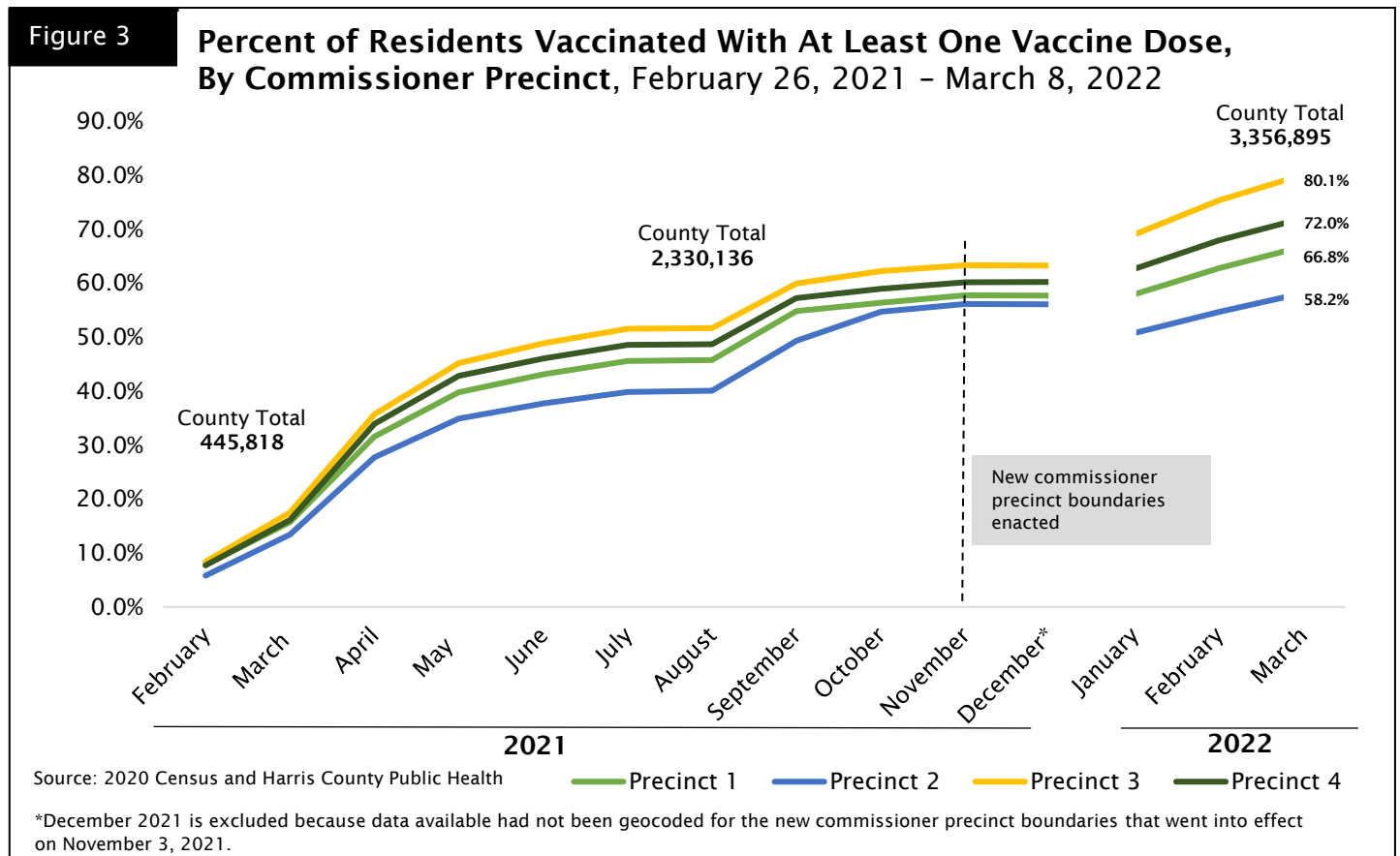
As of March 8, 2022, **61.1% (2,888,865)** of Harris County residents were fully vaccinated.^{xxv}

^{xxiv} Commissioner precinct boundaries used reflect boundaries effective November 3, 2021.

^{xxv} Figure assumes Harris County population of 4,731,145 according to the 2020 Census.

PERCENT OF RESIDENTS VACCINATED WITH AT LEAST ONE DOSE BY COMMISSIONER PRECINCT

Figure 3 demonstrates the growth in the percent of residents vaccinated *with at least one dose* by commissioner precinct from February 26, 2021, through March 8, 2022, for all four Harris County commissioner precincts.^{xxvi}



Between February 26, 2021, and March 8, 2022, 71.0% (3,356,895) of individuals in Harris County were vaccinated with at least one vaccine dose.^{xxvii} There was an increase of 0.9% (from 3,327,091 to 3,356,895) between February 8, 2022 (the prior memo) and March 8, 2022, of individuals vaccinated with at least one dose.

As of March 8, 2022:^{xxviii}

- **66.8% (790,573) of Precinct One residents** were vaccinated with at least one vaccine dose;
- **58.2% (688,059) of Precinct Two residents** were vaccinated with at least one vaccine dose;
- **80.1% (942,257) of Precinct Three residents** were vaccinated with at least one vaccine dose; and,
- **72.0% (856,114) of Precinct Four residents** were vaccinated with at least one vaccine dose.

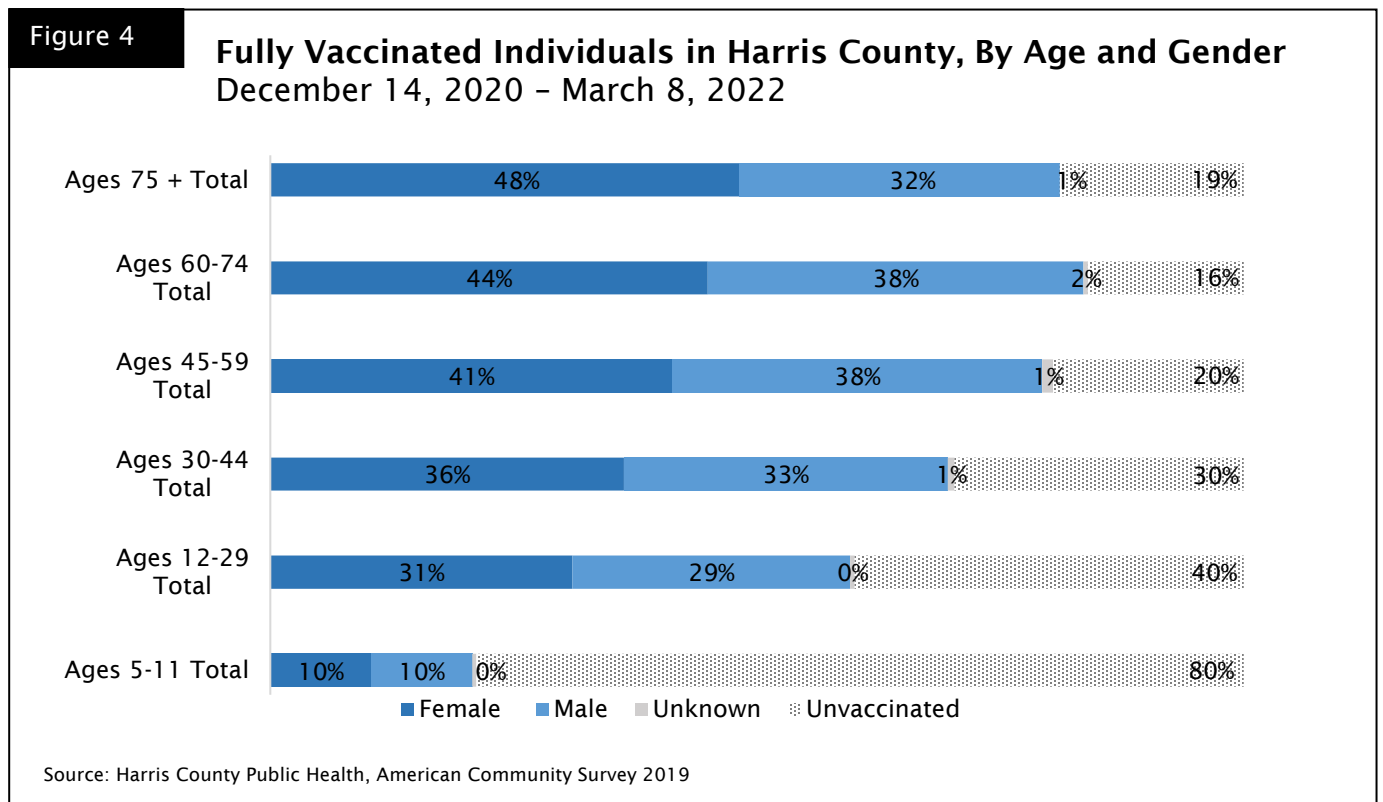
^{xxvi} Commissioner precinct boundaries used reflect boundaries effective November 3, 2021.

^{xxvii} Figure assumes Harris County's total population of 4,731,145, per the 2020 Census.

^{xxviii} Precinct totals do not sum to County total because 79,892 individuals have addresses that cannot be geo-coded into a Precinct.

FULLY VACCINATED INDIVIDUALS BY AGE AND GENDER

Figure 4 and **Table 3** which follows, reflect all individuals fully vaccinated by all providers in Harris County by the individual's age and gender. Each bar for each age group represents the age group's total population within Harris County's population and reflects the percentage of individuals in each age group vaccinated by gender.



Of the individuals who are fully vaccinated by a Harris County provider, 52% (1,508,478) are female; 47% (1,353,355) are male; and 1% (27,025) are recorded as unknown gender.^{xxix} As shown in **Figure 4**, individuals age 60-74 have the smallest percent of their age group who remain unvaccinated (16%), while individuals age 5-11 include the largest percent of their age group who remain unvaccinated (80%).

^{xxix} Age and gender totals do not sum to the total number of fully vaccinated individuals due to some records having incomplete or incorrect data.

FULLY VACCINATED INDIVIDUALS BY AGE GROUP

Table 3 reflects all individuals fully vaccinated by all providers in Harris County by the individual's age group and includes the percentage of Harris County's total age group population vaccinated. For context, **Table 3** also includes the percentage of Harris County's total population by age group.

Table 3 Fully Vaccinated Individuals in Harris County by Age Group December 14, 2020 – March 8, 2022			
Age Group	Number of Individuals Vaccinated	Percentage of Age Group Vaccinated ^{xxx}	Percentage of Eligible County Population ^{xxxi}
75+	156,330	81.3% ^{xxxii}	4.4%
60-74	480,768	84.2%	13.1%
45-59	675,926	80.3%	19.3%
30-44	736,757	70.2%	24.0%
12-29	739,763	59.9%	28.3%
5-11	99,314	20.8%	10.9%

Source: Harris County Public Health, American Community Survey 2019 1-Year Estimates

As shown in **Table 3**:

- 81.3% (156,330) of individuals ages 75 and over are fully vaccinated;
- 84.2% (480,768) of individuals ages 60-74 are fully vaccinated;
- 80.3% (675,926) of individuals ages 45-59 are fully vaccinated;
- 70.2% (736,757) of individuals ages 30-44 are fully vaccinated;
- 59.9% (739,763) of individuals ages 12-29 are fully vaccinated; and,
- 20.8% (99,314) of individuals ages 5-11 are fully vaccinated.

^{xxx} Reflects the number of individuals in the age group who are fully vaccinated. Previous versions of this memo reflected the total age group fully vaccinated as a percentage of all individuals vaccinated.

^{xxxi} Age group populations from American Community Survey 2019 data. Age groups 5-11 and 12-29 are estimated by the Analyst's Office due to data limitations.

^{xxxii} The February 2022 iteration of this memo reported the percentage of fully vaccinated 75+ residents as 81.8%; the correct figure is 81.1%. From February 2022 to March 2022, there is an increase of 0.2 percentage points.

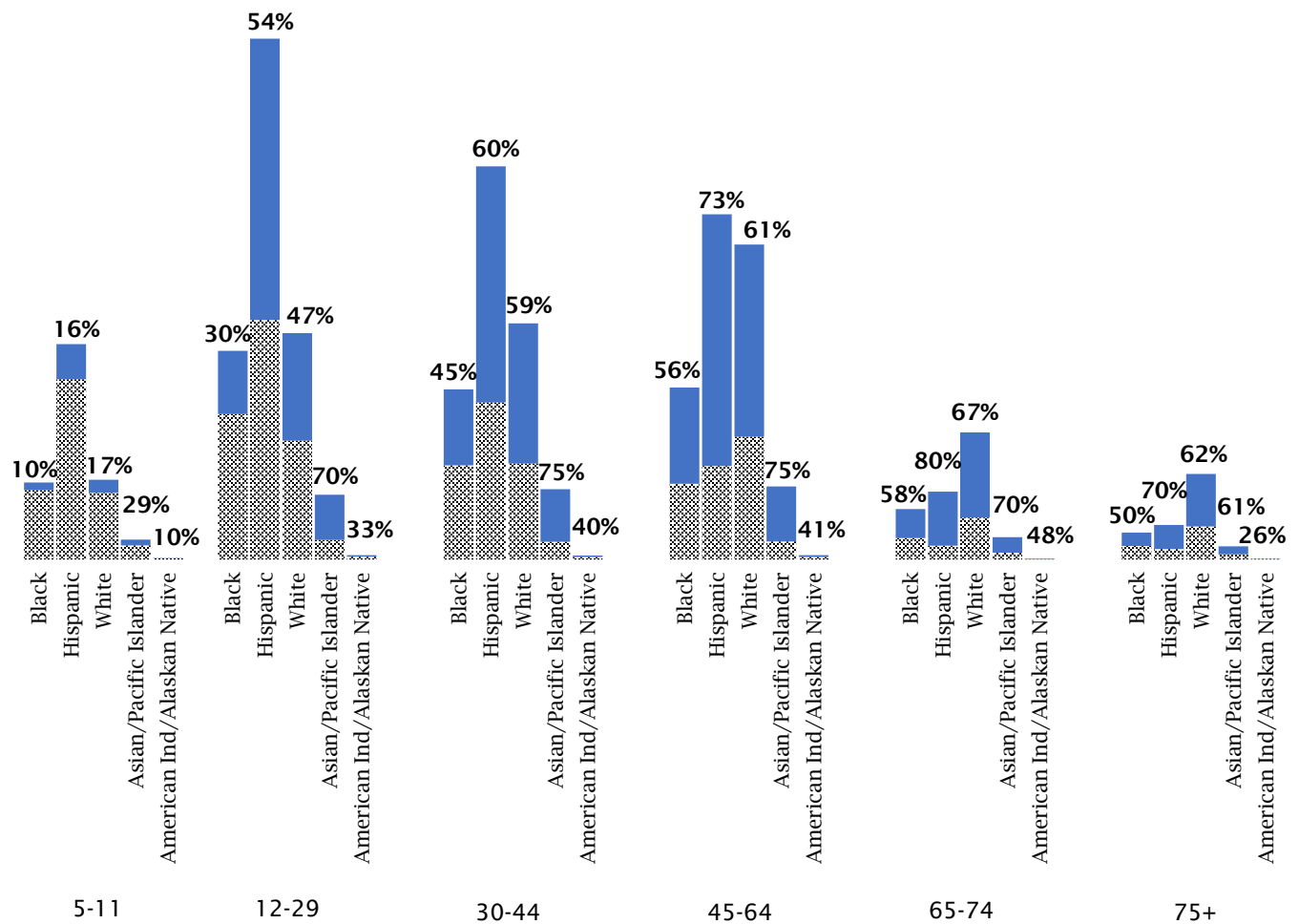
FULLY VACCINATED INDIVIDUALS BY RACE/ETHNICITY AND AGE GROUP

Figure 5 reflects all individuals fully vaccinated by all providers in Harris County by the individual's race and age group. Each bar represents the percentage of individuals vaccinated for the given age range by race/ethnicity. The height of the bars reflects the given race/ethnicity group's proportion of the total population for the given age group.

Figure 5

Fully Vaccinated Individuals in Harris County, By Race/Ethnicity and Age Group

December 14, 2020 - March 8, 2022



Source: American Community Survey 2019 1-Year Estimates and Harris County Public Health

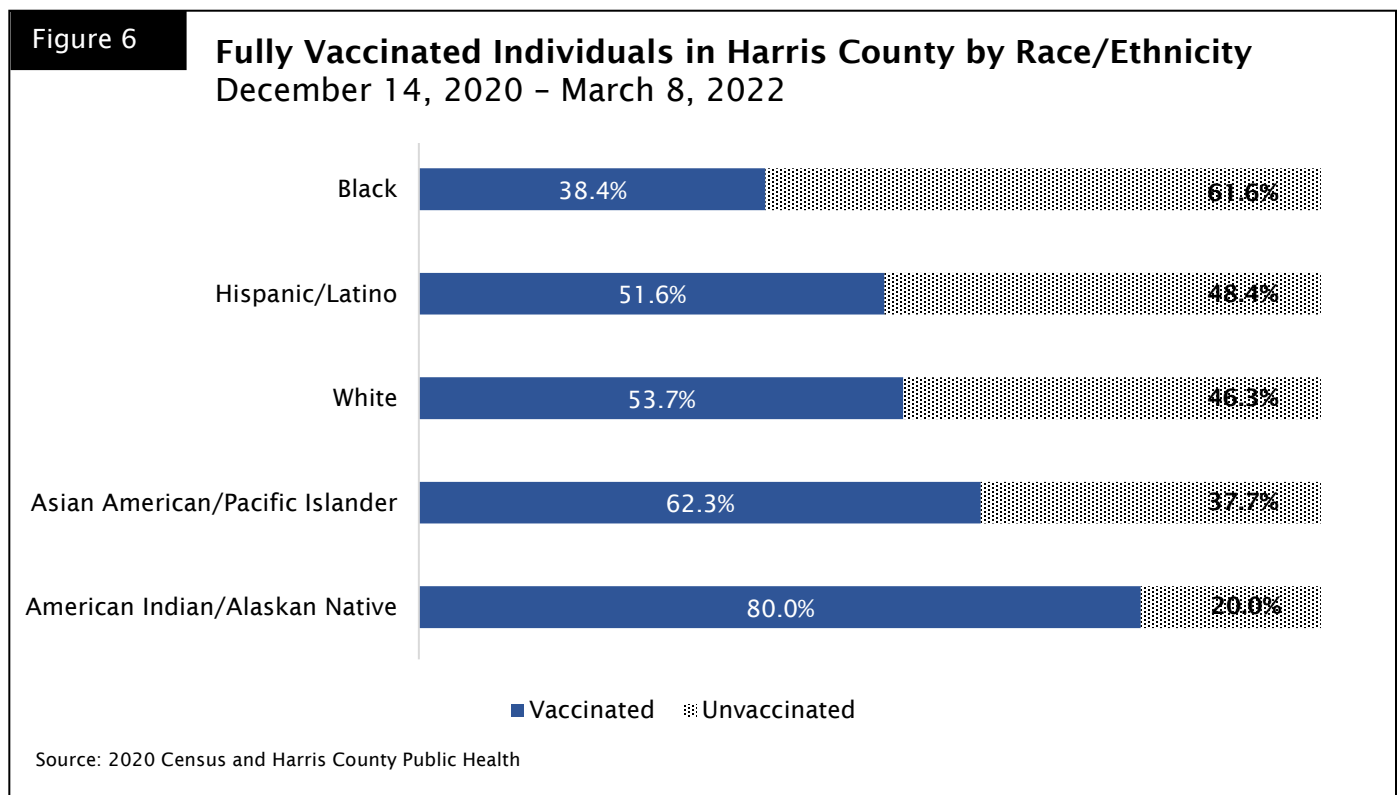
■ Vaccinated ■ Unvaccinated

As shown in **Figure 5**, for individuals fully vaccinated in Harris County, the demographic with the highest percentage of individuals vaccinated are individuals who identify as Hispanic ages 65-74 (80%). The demographics with the lowest percentage of individuals vaccinated are individuals who identify as Black ages 5-11 (10%) and individuals who identify as American Indian/Alaskan Native ages 5-11 (10%).

PERCENTAGE OF FULLY VACCINATED INDIVIDUALS BY RACE AND ETHNICITY

Figure 6 and **Table 4** which follows, reflect the percentage of individuals in Harris County who are fully vaccinated by all providers in Harris County by race and ethnicity.^{xxxiii}

Each bar for each race or ethnicity group represents the race or ethnicity group's total population within Harris County's population and reflects the percentage of individuals in each race and ethnicity group vaccinated.



As shown in **Figure 6**, individuals who identify as Black in Harris County have the smallest vaccinated population at 38.4%, followed by individuals who identify as Hispanic or Latino at 51.6%.

^{xxxiii} Note: Prior to February 4, 2021, providers were not required to report race and ethnicity when reporting doses to the Texas Department of State Health Services (DSHS) because vaccine recipients are allowed to decline disclosing their race and ethnicity to a provider.

FULLY VACCINATED INDIVIDUALS BY RACE AND ETHNICITY

Table 4 reflects the race and ethnicity of individuals in Harris County who are fully vaccinated by all providers in Harris County.^{xxxiv} For context, **Table 4** also includes the percentage of Harris County's total population by race and ethnicity.

Previous versions of this table in past memos reflected the total number of individuals by race and ethnicity fully vaccinated as a percentage of all individuals vaccinated—this version of the report shows the percentage vaccinated within a given race or ethnicity.

Table 4 Fully Vaccinated Individuals in Harris County by Race/Ethnicity December 14, 2020 – March 8, 2022			
Race/Ethnicity	Number of Individuals Vaccinated	Percentage of Race/Ethnicity Group Vaccinated ^{xxxv}	Percentage of Total Population
Black	340,233	38.4%	18.7%
Hispanic/Latino	1,050,041	51.6%	43.0%
White	703,080	53.7%	27.7%
Asian American/ Pacific Islander	216,679	62.3%	7.4%
American Indian/ Alaskan Native	6,748	80.0%	0.2%
Multi-Racial	270,935	NA	2.6%
Other/Unknown	301,149	NA	0.5%

Source: 2020 Census and Harris County Public Health

As shown in **Table 4**:

- 38.4% (340,233) of individuals who identify as Black are fully vaccinated;
- 51.6% (1,050,041) of individuals who identify as Hispanic/Latino are fully vaccinated;
- 53.7% (703,080) of individuals who identify as White are fully vaccinated;
- 62.3% (216,679) of individuals who identify as Asian American/Pacific Islander are fully vaccinated; and,
- 80.0% (6,748) of individuals who identify as American Indian/Alaskan Native are fully vaccinated.

^{xxxiv} Note: Prior to February 4, 2021, providers were not required to report race/ethnicity when reporting doses to Texas Department of State Health Services (DSHS) because vaccine recipients are allowed to decline disclosing their race/ethnicity to a provider.

^{xxxv} Note: The percentage of Harris County's total race and ethnicity group population that is vaccinated for Other/Unknown and Multi-racial is unavailable because there are more vaccinated individuals identifying as Multi-racial and Other/Unknown than the total population estimate of both groups in Harris County's 2020 Census data.

INDIVIDUALS FULLY VACCINATED BY RACE AND ETHNICITY AND COMMISSIONER PRECINCT

Table 5 reflects the race and ethnicity of individuals in Harris County who are fully vaccinated by providers in Harris County by commissioner precinct.^{xxxvi} For context, **Table 5** also includes the percentage of each commissioner precinct's total population by race and ethnicity.

Table 5 Fully Vaccinated Individuals in Harris County by Race/Ethnicity, By Commissioner Precinct December 14, 2020 – March 8, 2022			
Race/Ethnicity	Number of Individuals Vaccinated	Percentage of Precinct's Vaccinated Population	Percentage of Total Precinct Population
Precinct 1			
Black	146,106	21.6%	33.4%
Hispanic/Latino	248,879	36.8%	37.3%
White	106,050	15.7%	19.8%
Asian Am./Pacific Islander	41,301	6.1%	6.4%
Am. Indian/Alaskan Native	1,300	0.2%	0.1%
Multi-racial	71,999	10.6%	2.4%
Other/Unknown	60,966	9.0%	0.5%
Precinct 2			
Black	34,750	5.9%	10.2%
Hispanic/Latino	309,612	52.2%	63.6%
White	134,091	22.6%	20.3%
Asian Am./Pacific Islander	22,695	3.8%	3.6%
Am. Indian/Alaskan Native	973	0.2%	0.2%
Multi-racial	43,069	7.3%	1.7%
Other/Unknown	47,787	8.1%	0.4%
Precinct 3			
Black	76,179	9.4%	13.8%
Hispanic/Latino	254,532	31.4%	28.6%
White	222,228	27.4%	45.0%
Asian Am./Pacific Islander	89,181	11.0%	8.4%
Am. Indian/Alaskan Native	2,019	0.2%	0.2%
Multi-racial	93,799	11.6%	3.6%
Other/Unknown	73,559	9.1%	0.5%
Precinct 4			
Black	73,439	9.9%	17.4%
Hispanic/Latino	235,701	31.8%	42.4%
White	225,756	30.4%	25.7%
Asian Am./Pacific Islander	58,416	7.9%	11.0%
Am. Indian/Alaskan Native	1,722	0.2%	0.2%
Multi-racial	79,111	10.7%	2.6%
Other/Unknown	67,698	9.1%	0.7%

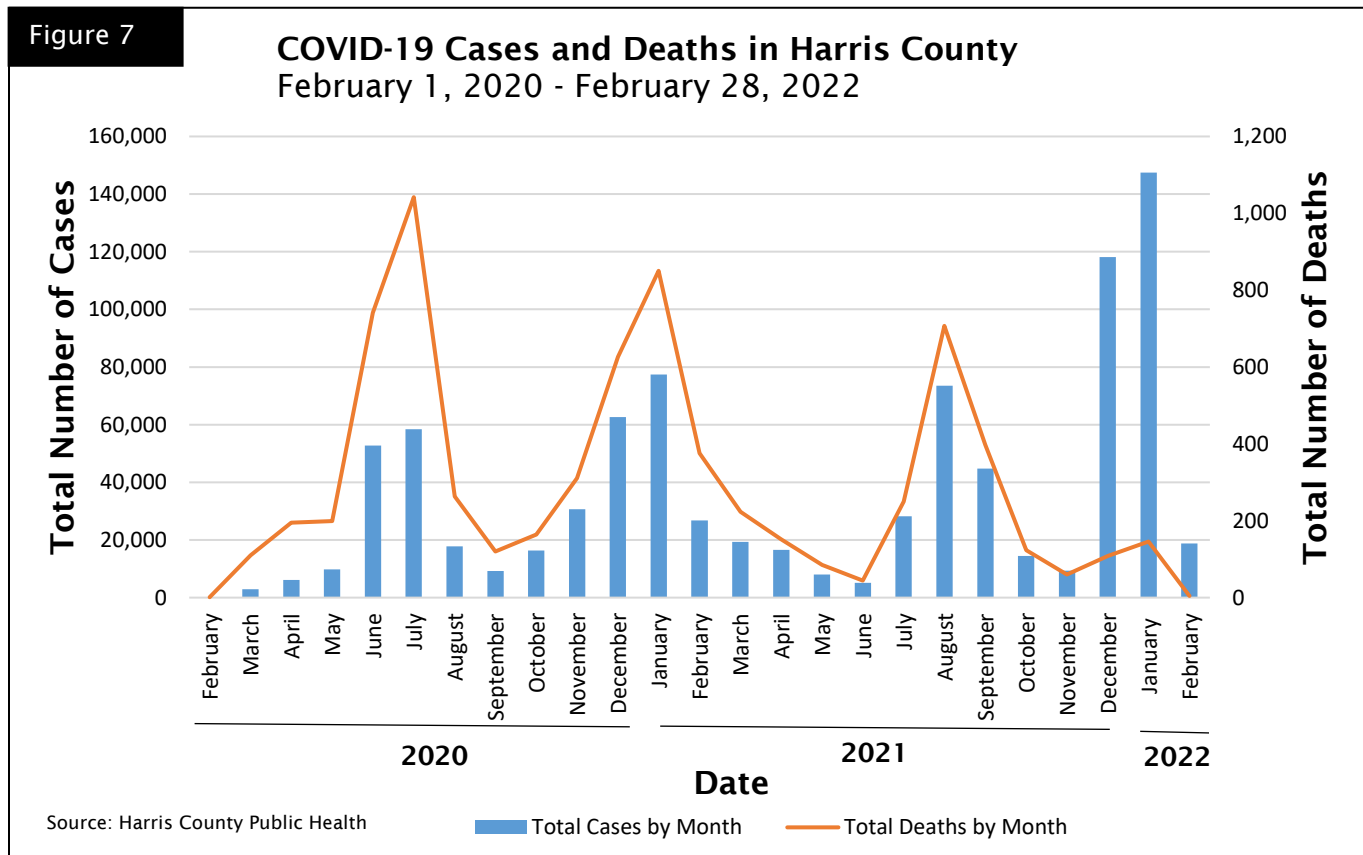
Sources: 2020 Census, Harris County Public Health, and Harris County Office of Management and Budget

^{xxxvi} Commissioner precinct boundaries used reflect boundaries effective November 3, 2021.

COVID-19 CASES AND DEATHS IN HARRIS COUNTY

Figure 7 represents both COVID-19 cases and COVID-19-related deaths in Harris County from February 1, 2020, through February 28, 2022.

Figure 7 captures the COVID-19 surges in Harris County in summer 2020, winter 2020-2021, and summer 2021—as well as the latest surge due to the Omicron variant.

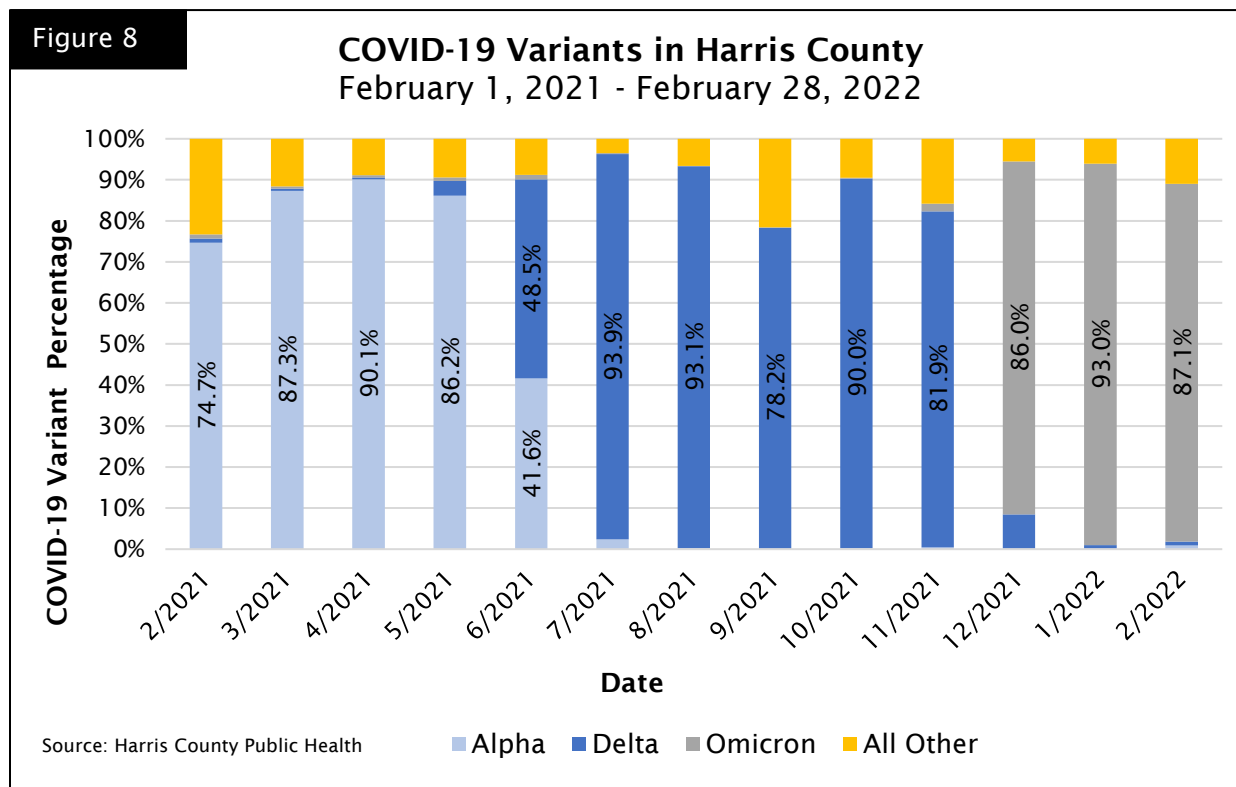


COVID-19 VARIANTS IN HARRIS COUNTY BASED ON TESTING

Figure 8 represents the prevalence of different variants of the COVID-19 virus in Harris County from February 1, 2021, through February 28, 2022. According to Harris County Public Health (HCPH), data regarding COVID-19 variants prior to February 2021 is unavailable. As data regarding COVID-19 variants is not shared between the health entities that have jurisdiction over various parts of Harris County, **Figure 8** only presents data collected from the parts of Harris County that HCPH has jurisdiction over.

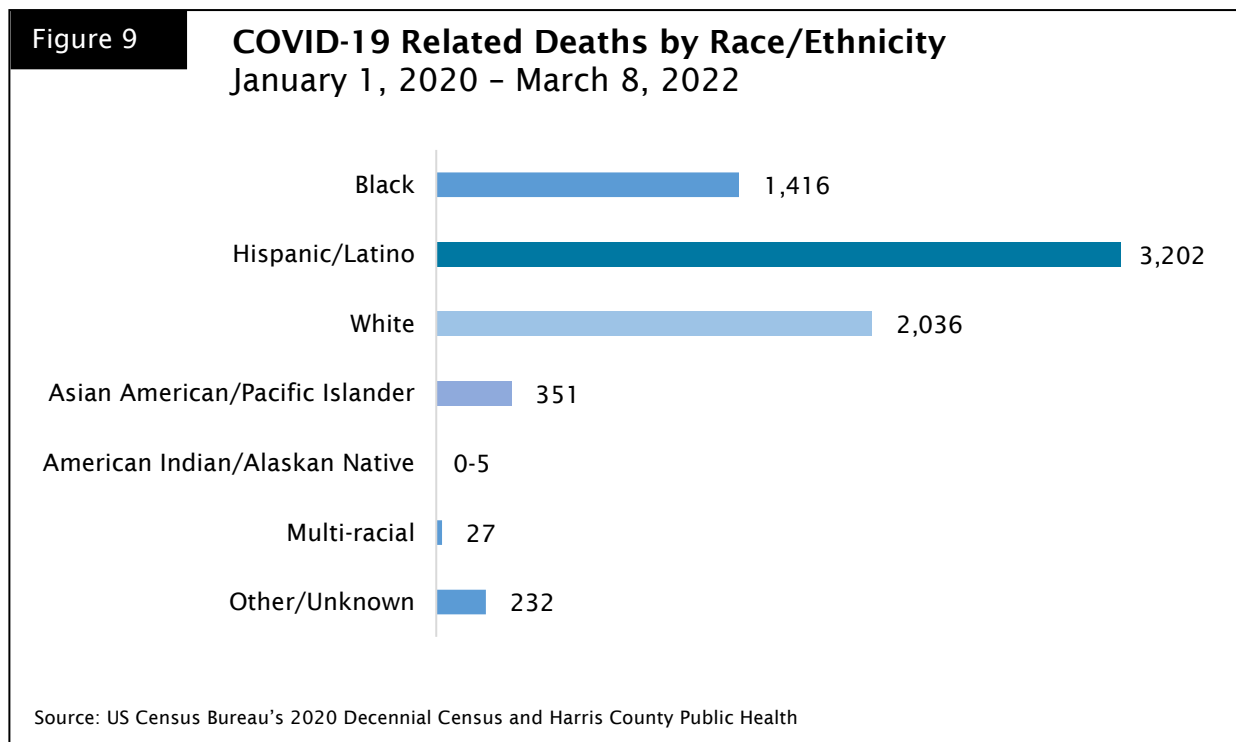
Figure 8 captures the initial surge of the Alpha variant beginning in early 2021, which was followed and replaced by the surge in the Delta variant during the summer of 2021 and then the Omicron variant during the winter of 2021-2022.

Of note, testing for COVID-19 variants is voluntary for test providers. In addition, sampling methodology and variant sequencing protocols differ between test providers, leading an overall small sample size. HCPH states that due to the sufficiently small sample size, the data presented can only be used to deduce overall trends regarding the prevalence of COVID-19 variants.



COVID-19-RELATED DEATHS BY RACE AND ETHNICITY

Figure 9 reflects the total number of confirmed COVID-19-related deaths in Harris County by race and ethnicity.^{xxxvii}



Of the 7,298 individuals in Harris County who died of a COVID-19-related death between January 1, 2020, and March 8, 2022:^{xxxviii}

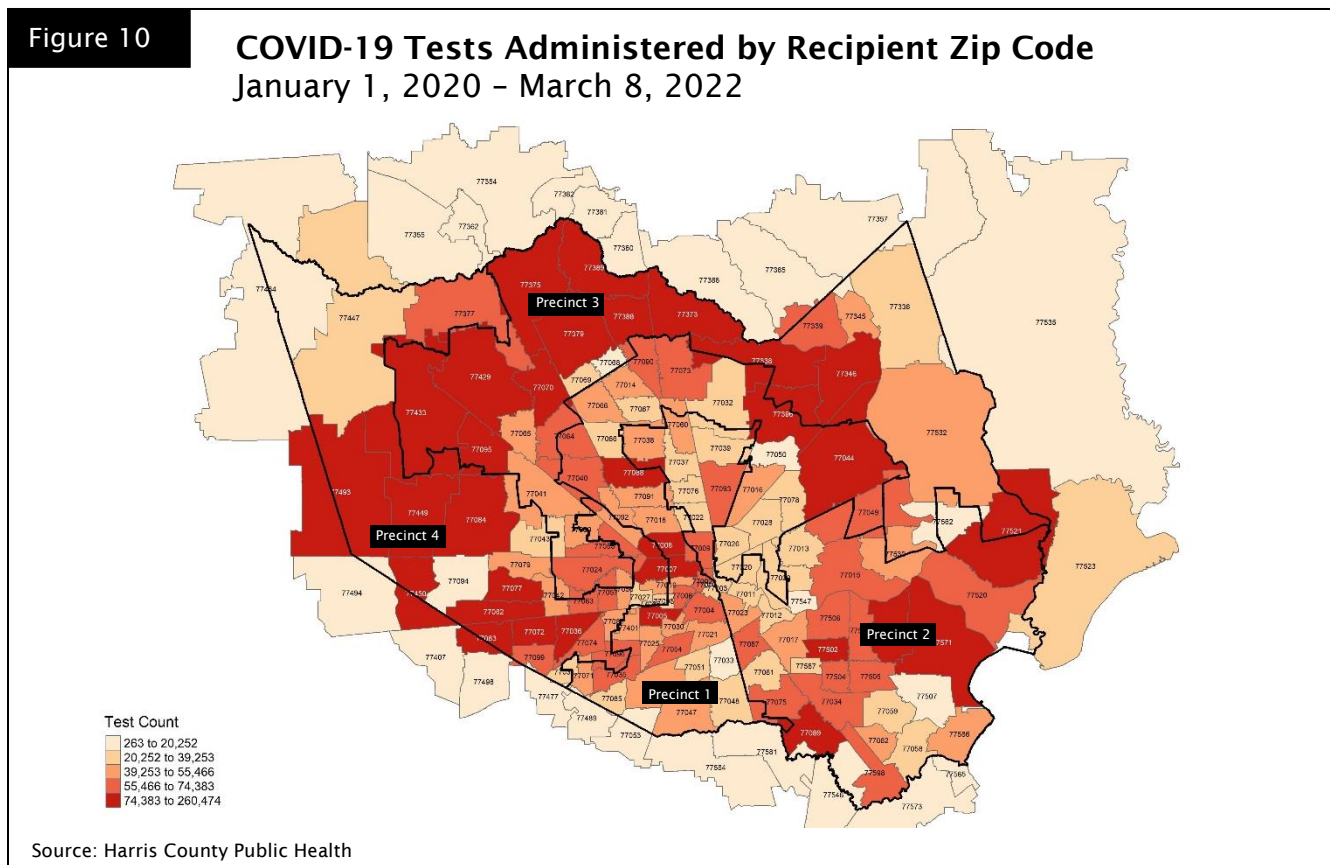
- **19.4% (1,416) identified as Black**, and for context, 18.7% of County residents identify as Black;
- **43.9% (3,202) identified as Hispanic/Latino**, and for context, 43.0% of County residents identify as Hispanic;
- **27.9% (2,036) identified as White**, and for context, 27.7% of County residents identify as White;
- **4.8% (351) identified as Asian or Pacific Islander**, and for context, 7.4% of County residents identify as Asian, Pacific Islander, or Native Hawaiian;
- **0.1% (0-5) identified as American Indian or Alaskan Native**, and for context, 0.2% of County residents identify as American Indian or Alaskan Native;
- **0.4% (27) identified as Multi-racial**, and for context, 2.6% of County residents identify as Two or More Races; and,
- **3.2% (232) were recorded as Other/Unknown race and ethnicity.**

^{xxxvii} Race and ethnicity totals do not sum to Total Precinct Deaths because 31 deaths do not have race and ethnicity data available.

^{xxxviii} County-level race and ethnicity data are derived from the 2020 Census population estimates.

COVID-19 TESTS BY ZIP CODE

Figure 10 reflects the total number of COVID-19 polymerase chain reaction (PCR) tests administered to Harris County residents by all providers in Harris County by zip code, and **Table 6** reflects the number of COVID-19 PCR tests administered by the commissioner precinct.^{xxxix xl}



Between January 1, 2020, and March 8, 2022, providers in Harris County **administered 8,779,529 COVID-19 tests**. For a full list of tests administered by recipient zip code, see **Appendix A**.^{xli}

Table 6

COVID-19 Tests Administered, by Commissioner Precinct and for Harris County, January 1, 2020 – March 8, 2022

Precinct 1	Precinct 2	Precinct 3	Precinct 4	Total Tests
1,952,095	1,940,172	2,090,016	1,857,900	8,779,529

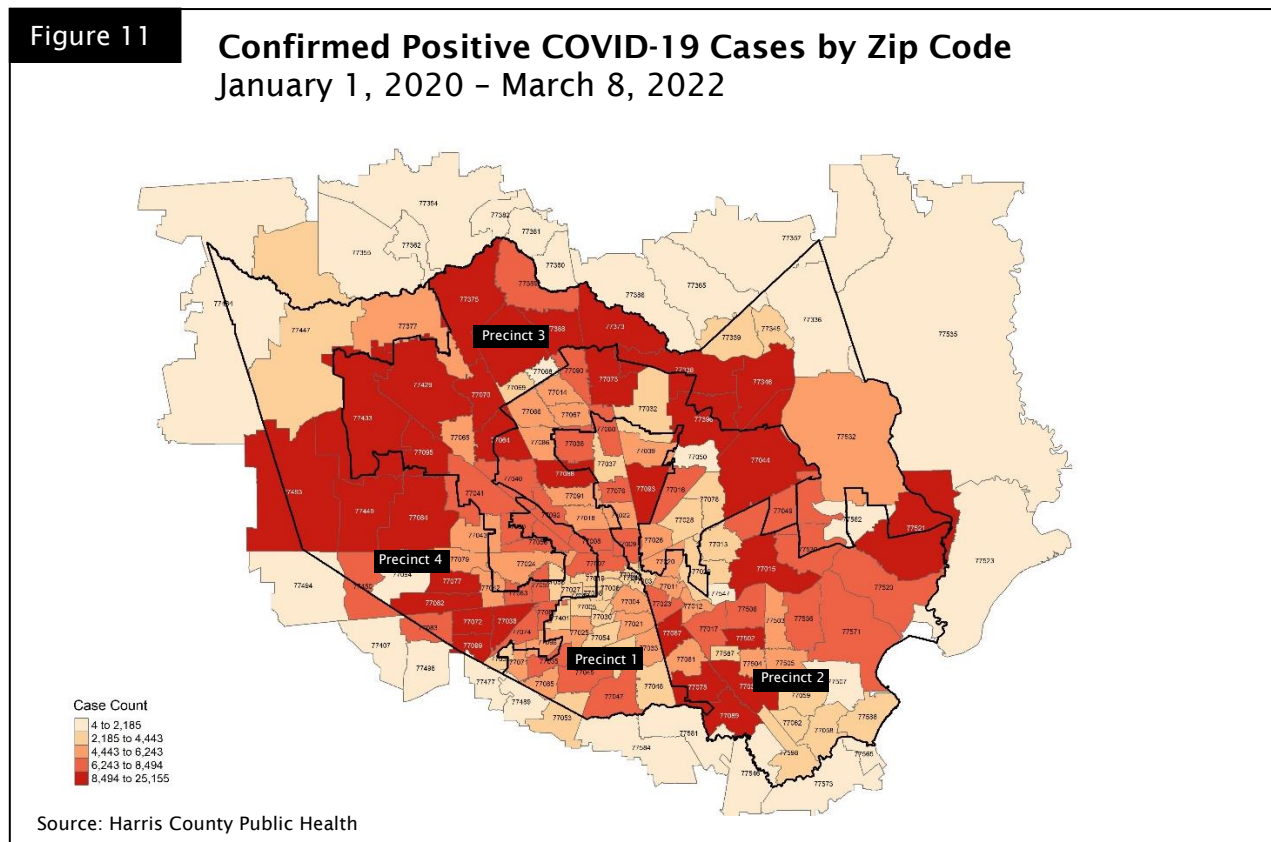
^{xxxix} PCR refers to the polymerase chain reaction tests commonly used to test for COVID-19.

^{xl} Commissioner precinct boundaries used reflect boundaries effective November 3, 2021.

^{xli} Precinct totals do not sum to Total Tests because 939,346 tests administered have addresses that cannot be geo-coded into a Precinct.

CONFIRMED POSITIVE COVID-19 CASES BY ZIP CODE

Figure 11 reflects the total number of COVID-19 positive cases confirmed by a PCR test in Harris County, reported by zip code, and **Table 7** reflects the number of positive COVID-19 cases by commissioner precinct.^{xlvi} ^{xlvi}



Between January 1, 2020, and March 8, 2022, there were **866,082 confirmed positive cases of COVID-19** in Harris County. For a full list of positive cases by zip code, see **Appendix B**.^{xlvi}

Table 7

Confirmed Positive Cases by Commissioner Precinct and for Harris County, January 1, 2020 – March 8, 2022									
Precinct 1		Precinct 2		Precinct 3		Precinct 4		County	
Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of County Population
221,224	18.7%	237,498	20.1%	193,019	16.4%	208,741	17.6%	866,082	18.3%

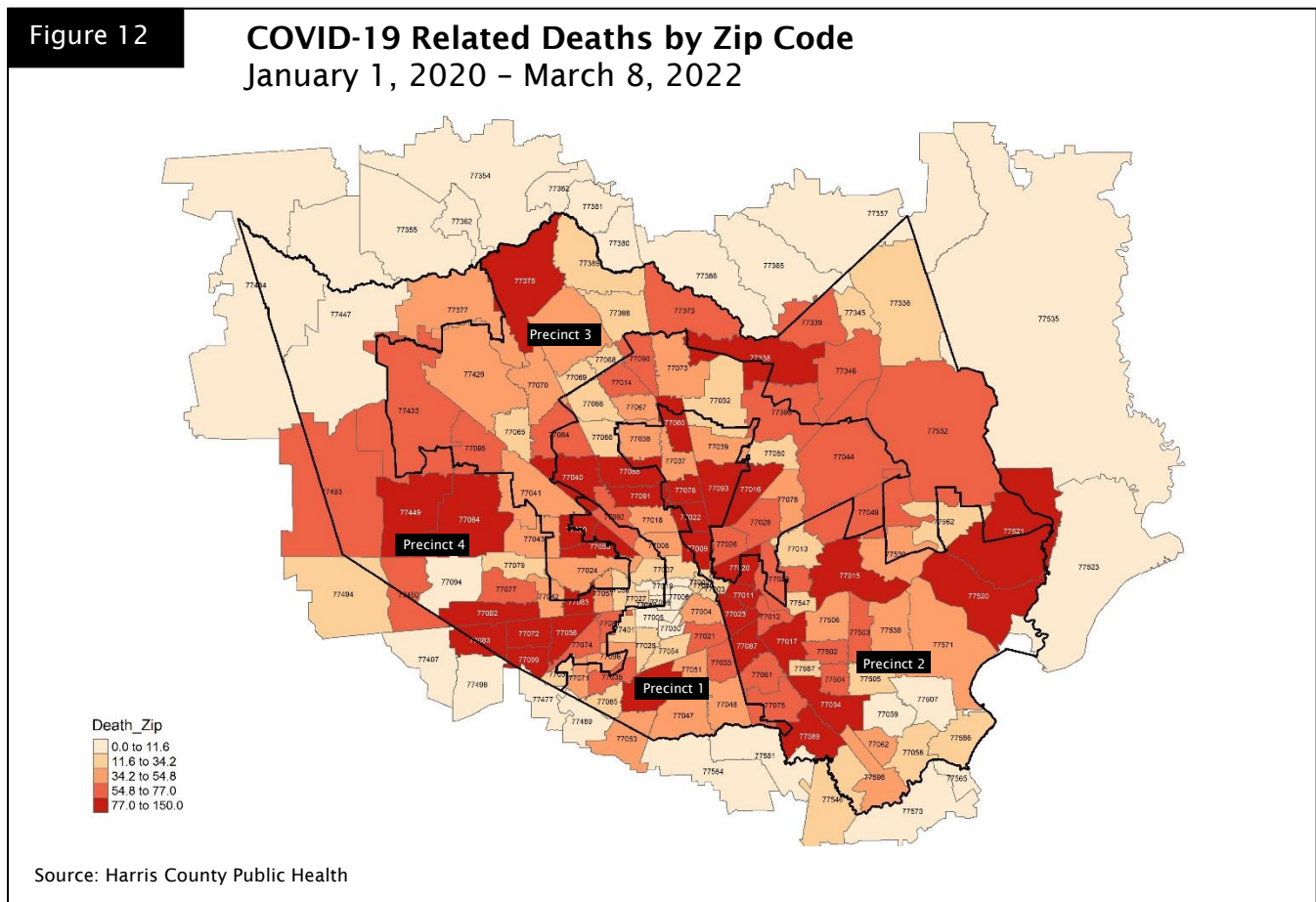
^{xlvi} PCR refers to the polymerase chain reaction tests commonly used to test for COVID-19.

^{xlvi} Commissioner precinct boundaries used reflect boundaries effective November 3, 2021.

^{xlvi} Precinct totals do not sum to Total Positive Cases because 5,600 confirmed positive cases have addresses that cannot be geo-coded into a Precinct.

CONFIRMED COVID-19 RELATED DEATHS BY ZIP CODE

Figure 12 reflects the total number of confirmed COVID-19-related deaths in Harris County by zip code, and **Table 8** reflects the number of COVID-19-related deaths by commissioner precinct.^{xliv}



Between January 1, 2020, and March 8, 2022, there were **7,298 confirmed COVID-19-related deaths** in Harris County. For a full list of deaths by zip code, see **Appendix C**.^{xlvi}

Table 8

COVID-19 Related Deaths by Commissioner Precinct and for Harris County, January 1, 2020 – March 8, 2022									
Precinct 1		Precinct 2		Precinct 3		Precinct 4		County Total	
Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of County Population
1,873	0.16%	2,395	0.20%	948	0.08%	2,007	0.17%	7,298	0.15%

^{xliv} Commissioner precinct boundaries used reflect boundaries effective November 3, 2021.

^{xlvi} Precinct totals do not sum to Total Deaths because 75 deaths have addresses that cannot be geo-coded into a precinct.

APPENDIX A

Total COVID-19 Tests Administered by Zip Code Ordered by Tests Administered, January 1, 2020 – March 8, 2022							
Zip Code	Tests Administered	Zip Code	Tests Administered	Zip Code	Tests Administered	Zip Code	Tests Administered
77565	263	77029	25,534	77017	50,874	77054	72,929
77362	301	77069	26,949	77079	51,677	77055	73,931
77381	302	77051	27,121	77041	52,164	77339	74,074
77382	362	77085	27,159	77019	52,669	77072	74,846
77380	507	77058	28,445	77045	53,036	77088	75,861
77354	783	77011	29,037	77065	54,339	77008	76,610
77355	1,024	77523	29,493	77042	54,382	77044	78,531
77477	1,244	77059	31,419	77530	54,668	77536	78,955
77535	1,314	77026	31,446	77025	54,974	77070	79,487
77386	1,375	77587	32,135	77047	55,011	77571	80,196
77489	1,505	77098	33,900	77532	55,190	77389	81,461
77507	1,740	77039	34,349	77080	55,414	77502	81,868
77357	1,780	77048	35,495	77002	55,479	77036	83,922
77581	1,798	77027	35,546	77087	55,547	77082	85,070
77498	1,911	77067	35,798	77035	55,577	77388	88,825
77010	1,929	77447	35,914	77503	56,051	77007	90,023
77365	2,641	77020	36,758	77598	56,488	77338	93,313
77584	2,933	77086	37,062	77093	56,549	77089	95,050
77053	3,003	77061	37,085	77504	56,629	77077	98,732
77573	3,045	77043	37,267	77034	57,604	77083	108,685
77046	3,635	77022	38,104	77075	58,717	77373	109,254
77494	4,574	77076	39,236	77006	58,796	77521	111,727
77407	4,893	77030	39,320	77074	58,807	77375	124,257
77050	5,745	77062	39,398	77057	58,926	77450	127,444
77546	5,842	77016	42,458	77073	59,403	77396	134,485
77094	14,889	77091	42,937	77049	60,434	77346	135,114
77562	15,454	77014	43,003	77090	60,542	77095	145,825
77068	16,163	77038	43,323	77096	60,850	77379	150,673
77547	16,992	77021	43,798	77505	61,144	77005	156,923
77033	18,158	77023	44,688	77520	62,009	77084	159,291
77484	19,883	77071	44,954	77063	62,284	77429	170,755
77031	20,498	77066	45,672	77004	64,601	77433	206,324
77336	20,726	77345	45,873	77040	64,723	77449	260,474
77078	20,878	77060	46,170	77099	67,729		
77013	21,089	77092	47,072	77506	68,130		
77037	23,235	77586	47,457	77009	70,748		
77028	25,017	77056	48,041	77377	71,051		
77003	25,099	77018	48,346	77064	71,124		
77032	25,129	77401	49,095	77024	71,704		
77012	25,280	77081	49,730	77015	72,925		

APPENDIX B

Total COVID-19 Confirmed Positive Cases by Zip Code Ordered by Positive Cases, January 1, 2020 – March 8, 2022

Zip Code	Positive Cases	Zip Code	Positive Cases	Zip Code	Positive Cases	Zip Code	Positive Cases
77565	4	77058	3,010	77067	5,358	77060	7,998
77382	4	77069	3,016	77086	5,477	77009	8,084
77362	6	77027	3,096	77024	5,604	77055	8,148
77355	6	77013	3,238	77066	5,677	77040	8,226
77381	7	77078	3,301	77532	5,727	77007	8,470
77535	10	77051	3,524	77020	5,765	77080	8,488
77354	12	77587	3,526	77033	5,851	77064	8,504
77357	29	77032	3,552	77096	5,895	77338	8,542
77573	31	77056	3,711	77377	5,901	77034	8,617
77380	38	77586	3,761	77079	5,916	77502	8,651
77386	39	77006	3,818	77065	5,941	77087	8,659
77498	88	77002	3,895	77091	6,076	77388	8,692
77010	105	77005	3,918	77042	6,237	77073	8,711
77365	109	77028	3,933	77022	6,238	77082	9,031
77507	121	77029	3,972	77063	6,244	77075	9,086
77407	127	77053	4,039	77016	6,262	77070	9,371
77584	135	77037	4,073	77038	6,317	77077	9,845
77581	189	77019	4,156	77041	6,324	77099	9,893
77523	229	77339	4,307	77057	6,452	77093	10,040
77046	316	77062	4,365	77023	6,488	77072	10,212
77484	487	77054	4,374	77530	6,619	77044	10,657
77477	546	77048	4,375	77035	6,644	77521	10,683
77050	770	77598	4,437	77008	6,690	77088	10,939
77094	1,312	77025	4,469	77047	6,856	77015	11,077
77494	1,417	77085	4,503	77092	6,888	77375	11,246
77562	1,619	77011	4,526	77536	7,040	77373	11,606
77489	1,711	77012	4,605	77520	7,088	77036	11,769
77336	1,845	77504	4,726	77571	7,148	77396	11,825
77068	1,866	77061	4,780	77506	7,187	77095	12,224
77546	1,974	77505	4,800	77090	7,308	77346	12,339
77547	2,090	77026	4,829	77450	7,336	77089	12,435
77401	2,248	77043	4,975	77083	7,358	77379	13,747
77003	2,458	77021	5,075	77074	7,360	77429	14,188
77030	2,481	77018	5,149	77076	7,380	77433	17,445
77098	2,577	77014	5,184	77049	7,452	77084	21,667
77059	2,588	77039	5,205	77389	7,497	77449	25,155
77447	2,677	77004	5,228	77045	7,555		
77031	2,896	77071	5,239	77081	7,688		
77345	2,903	77503	5,356	77017	7,691		

APPENDIX C

Total Confirmed COVID-19 Related Deaths by Zip Code Ordered by Number of Deaths, January 1, 2020 – March 8, 2022							
Zip Code	COVID Deaths	Zip Code	COVID Deaths	Zip Code	COVID Deaths	Zip Code	COVID Deaths
77565	0-5	77054	18	77062	42	77074	73
77382	0-5	77389	18	77042	42	77049	73
77362	0-5	77547	19	77078	43	77075	75
77355	0-5	77056	20	77057	43	77346	76
77381	0-5	77345	21	77070	43	77091	77
77535	0-5	77336	22	77379	43	77063	77
77354	0-5	77065	22	77053	44	77023	78
77357	0-5	77562	23	77429	44	77040	78
77573	0-5	77079	23	77004	45	77083	79
77380	0-5	77546	24	77506	49	77015	79
77386	0-5	77007	24	77571	52	77011	80
77498	0-5	77032	26	77039	53	77060	80
77010	0-5	77025	26	77043	54	77375	82
77365	0-5	77031	27	77038	54	77084	82
77507	0-5	77587	27	77503	55	77045	85
77407	0-5	77388	27	77090	56	77034	87
77584	0-5	77003	28	77450	56	77099	88
77523	0-5	77058	29	77044	56	77017	89
77046	0-5	77013	29	77014	57	77521	91
77484	0-5	77086	30	77433	58	77080	95
77094	0-5	77085	31	77028	59	77020	97
77477	6	77066	31	77061	60	77076	97
77447	7	77505	34	77092	60	77009	97
77489	7	77051	35	77012	61	77082	100
77059	9	77037	35	77021	61	77016	103
77006	9	77096	37	77532	61	77022	110
77005	9	77041	37	77029	62	77055	110
77019	9	77008	37	77502	62	77093	111
77030	10	77536	37	77077	63	77338	113
77098	10	77073	37	77081	68	77089	114
77581	11	77048	38	77504	69	77087	115
77050	12	77071	39	77033	69	77088	125
77401	12	77377	39	77396	70	77520	126
77027	12	77018	40	77095	70	77036	128
77068	14	77067	40	77064	71	77072	140
77494	17	77024	40	77373	71	77449	150
77069	17	77598	41	77339	73		
77586	17	77530	41	77026	73		
77002	17	77047	41	77035	73		

APPENDIX D

Number of Individuals Per 100,000 Residents Fully Vaccinated and Social Vulnerability Index (SVI), Ordered by Residents Vaccinated, December 14, 2020 – March 8, 2022^{xlvi}

Zip Code	Per 100k Rate	SVI	Zip Code	Per 100k Rate	SVI	Zip Code	Per 100k Rate	SVI	Zip Code	Per 100k Rate	SVI
77336	38,492	0.30	77504	53,827	0.88	77505	60,120	0.24	77096	66,713	0.39
77090	42,241	0.70	77081	53,827	0.81	77429	60,152	0.06	77089	67,248	0.47
77532	44,055	0.37	77547	53,849	0.66	77388	60,213	0.13	77054	67,742	0.26
77562	44,537	0.63	77051	53,938	0.80	77015	60,604	0.76	77057	67,824	0.34
77004	46,633	0.53	77080	54,315	0.83	77375	60,716	0.45	77079	68,575	0.27
77520	47,789	0.82	77338	55,022	0.58	77377	60,850	0.24	77389	68,830	0.14
77067	49,061	0.79	77061	55,075	0.70	77433	60,858	0.11	77018	69,181	0.48
77530	49,068	0.59	77034	55,161	0.67	77069	60,890	0.22	77041	69,729	0.31
77050	49,183	0.71	77044	55,480	0.41	77449	61,497	0.36	77009	69,761	0.62
77521	49,345	0.64	77049	55,594	0.63	77084	61,799	0.36	77094	70,652	NA
77060	49,844	0.94	77088	55,685	0.77	77066	61,829	0.59	77083	73,761	0.53
77503	50,501	0.82	77035	55,854	0.74	77095	62,019	0.23	77025	74,014	0.32
77571	50,681	0.38	77016	56,109	0.89	77082	62,323	0.54	77006	74,576	0.09
77013	50,772	0.98	77033	56,252	0.93	77379	62,716	0.21	77002	77,271	0.42
77036	51,519	0.93	77086	56,283	0.78	77017	62,801	0.66	77008	78,169	0.08
77091	51,795	0.92	77502	56,547	0.89	77055	63,987	0.68	77007	80,320	0.01
77021	51,980	0.74	77586	57,072	0.18	77064	64,140	0.47	77005	80,764	0.03
77026	52,066	0.94	77020	57,233	0.89	77087	64,187	1.00	77059	81,660	0.05
77598	52,191	0.57	77075	57,406	0.61	77023	64,535	0.76	77032	85,325	0.99
77536	52,218	0.44	77038	57,704	0.50	77345	64,566	0.05	77098	88,509	0.07
77039	52,292	0.73	77587	57,773	0.91	77045	64,626	0.84	77401	89,059	0.03
77506	52,626	0.95	77022	57,797	0.97	77077	64,770	0.29	77019	93,287	0.09
77028	52,703	0.84	77047	57,829	0.55	77099	64,841	0.80	77027	110,095	0.01
77073	52,815	0.50	77068	58,287	0.43	77450	64,899	0.18	77010	120,725	0.02
77093	53,144	0.97	77447	58,451	0.45	77043	65,040	0.52	77024	125,273	0.16
77396	53,148	0.51	77031	58,492	0.64	77011	65,349	0.96	77030	134,471	0.28
77078	53,153	0.89	77042	58,677	0.38	77071	65,392	0.68	77056	148,593	0.14
77014	53,375	0.78	77346	58,735	0.12	77092	65,410	0.75	77507	182,078	NA
77076	53,459	0.86	77070	59,195	0.49	77085	65,453	0.60	77523	189,986	0.26
77074	53,507	0.86	77063	59,254	0.57	77072	65,552	0.87	77046	195,632	0.10
77048	53,510	0.85	77065	59,604	0.43	77029	65,626	0.88	77498	1,099,306	0.33
77037	53,595	0.69	77058	59,666	0.46	77062	66,485	0.19			
77373	53,650	0.30	77040	59,871	0.55	77339	66,523	0.32			
77053	53,680	0.72	77012	59,986	0.99	77003	66,554	0.61			

^{xlvi} Table excludes data for zip codes with unavailable population and vaccination data.



The Harris County Commissioners Court's Analyst's Office provides the Harris County Commissioners Court members with objective, nonpartisan, and timely fiscal and policy analysis related to the efficiency and effectiveness of various County operations.

This memo was prepared by Ramin Naderi, Analyst and Amy Rose, Senior Analyst.

Commissioners Court's Analyst's Office
1001 Preston Street, 7th Floor
Houston, Texas 77002

Main: (832) 927-6900
Email: info@ccao.hctx.net